

IN THE SPECIFICATION:

Please **AMEND** paragraph 0018, as follows:

[0018] These and other objects and advantages of the invention will become apparent and more readily appreciated from the following description of the preferred embodiments, taken in conjunction with the accompanying drawings of which:

Fig. 1 is a graph showing a general discharge curve of the conventional lithium-sulfur battery cell.

Fig. 2 is a scanning electronic microscope (SEM) view showing a surface of a positive electrode according to an embodiment of the present invention prior to fabrication of the lithium-sulfur cell;

Figs. 3A and 3B are SEM views showing surfaces of positive electrodes according to Example 3 and Comparative Example 1 after undergoing two cycles of charging-discharging;

Fig. 4 is a graph showing discharge curves of the lithium-sulfur battery cells according to Examples 1-4 and Comparative Example 1.

Fig. 5 is a graph showing cycle life characteristics of the lithium-sulfur battery cells according to Example 5, Example 6, and Comparative ~~Examples~~ Example 1 and 2.

FIG. 6 is a perspective view of a cross section of a lithium sulfur battery according to an embodiment of the present invention.

Please **AMEND** paragraph 0055, as follows:

~~Comparative Example 2~~Example 6

[0055] A positive electrode was prepared by the same procedure as described in Comparative Example 1 except that the particle size of the sulfur was 15 μm . The energy density of the resultant positive electrode was 0.9 mAh/cm². Using a lithium metal with a thickness of 130 μm as a counter electrode, and 1,3-dioxolane/diglyme/sulfolane/dimethoxy ethane (50/20/10/20, by volume ratio) including 1M LiSO₃CF₃ as an electrolyte as an electrolyte solvent, a coin-type cell was fabricated in a glove box in which moisture was controlled.

Please **AMEND** paragraphs 0057 and 0058 as follows:

[0057] The cells of Examples 1 to 4, Example 6, and Comparative Example 1 and 2 were charged for 5.5 hours with a current density of 0.2 mA/cm² or to the voltage of 2.8 V and discharged with a current of 0.1 mA/cm². The capacities of the cells were measured after 1, 10, 30, and 50 cycles, and the capacity retentions are shown in Table 1 below:

Table 1

Capacity retention	1 cycle (%)	10 cycles (%)	30 cycles (%)	50 cycles (%)
Example 1	100	80	75	70
Example 2	100	80	75	55
Example 3	100	85	70	65
Example 4	100	90	70	60
Comparative Example 1	100	60	50	30
<u>Example 6</u>	100	75	68	55
Comparative Example 2				

[0058] As shown in Table 1, after 50 cycles, the capacities of the cells of Examples 1 to 4 were reduced by 40 to 30%, while those of Comparative ~~Examples~~ Example 1 and 2 Example 6 were reduced by 70% and 45%, respectively.

Please **AMEND** paragraphs 0060 to 0062 as follows:

[0060] The cells of Example 5, Example 6, and Comparative ~~Examples~~ Example 1 and 2 were charged to a voltage of 2.5 V with a current density of 0.2 mA/ cm², and it was discharged with varying the current density of 0.1 mA/ cm², 0.2 mA/ cm², 0.5 mA/ cm², and 1.0 mA/ cm². Table 2 shows the results of the discharging capacity retentions according to the discharge current density.

Table 2

Discharge current density retention	0.1 mA/cm ² (%)	0.2 mA/cm ² (%)	0.5 mA/ cm ² (%)	1.0 mA/cm ² (%)
Example 5	100	97	93	88
Comparative Example 1	100	90	81	62
Comparative Example <u>2Example 6</u>	100	95	87	72

[0061] As shown in Table 2, the lithium-sulfur cell of Example 5 has a discharge capacity retention that is about twice as high as those of Comparative ~~Examples-Example 1~~ and Example 62. This means that the structure of the electrode including a plasticizer is well maintained even when increasing the discharge current density. Further, the increased capacity results from the increasing of the surface area due to the reduction of pore size.

[0062] In addition, Fig. 5 illustrates the cycle life characteristics of cells of Example 5₁ and Comparative ~~Examples-Example 1~~ and 2Example 6. Referring Fig. 5, the cycle life of the cell of Example 5 is significantly improved over the cells of Comparative Example ~~Examples-1~~ and 2Example 6.